

REMARKS

Claims 1-24 are in the application.

Claims 1, 3, 5, 13 and 22-24 have been amended to recite a first cycle out of phase with a second cycle by less than one interval.

§ 102 Rejections

In the Office Action, claims 1-5, 7-9, 13, 15-18 and 22-24 were rejected under 35 U.S.C. § 102 as being anticipated by U.S. Patent Number 5,022,024 to Paneth *et al.*, hereinafter “Paneth”.

Brief Description of the Cited Art

Paneth describes a system for transmitting wireless signals between a base station and one or more subscribers. The signals are transmitted over a plurality of channel pairs. See Paneth, column 1, lines 23-54. The system uses full duplex channels and accommodates several simultaneous conversations per channel. Each full duplex channel consists of a receive and a transmit frequency separated by 5 Megahertz (MHz). The lower frequency of each channel is assigned to the base station for transmission and is called the forward frequency. The higher frequency of each channel, called the reverse frequency, is assigned to the subscriber stations for transmission. The base station transmits on the forward frequency and receives on the reverse frequency. The opposite is true for the subscriber stations. See Paneth, column 11, line 64 to column 12, line 8.

To accommodate multiple conversations per channel, each channel is divided into slots. The slots fit in a system frame and the number of slots within the frame is defined by a modulation-level of the channel. Slots on the reverse and forward frequencies are offset in time by at least one slot time thus obviating having the subscriber stations operate in full-duplex mode. See Paneth, column 13, lines 37-42.

Differences Between the Cited Art and the Claimed Invention

Representative claim 1 recites:

1. A method of staggering channels in a wireless communications unit comprising:
 - identifying a first plurality of channels dedicated for wireless communication from the wireless communications unit to one or more remote wireless communications units;
 - identifying a second plurality of channels dedicated for communication from the one or more remote wireless communications units to the wireless communications unit;
 - scheduling the first plurality of channels according to a first predetermined cycle; and
 - scheduling the second plurality of channels according to a second predetermined cycle, wherein each channel in the first and second plurality of channels is dedicated for communication between the wireless communications unit and a single remote wireless communications unit at a predetermined interval and, ***wherein the second predetermined cycle is out of phase with the first predetermined cycle by less than one interval.***

The Applicants respectfully submit that Paneth fails to teach or suggest wireless communication that involves ***a second predetermined cycle that is out of phase with a first predetermined cycle by less than one interval.***

At best, Paneth teaches a system where slots on a reverse frequency are offset in time by at least one slot time with slots on a forward frequency. However, nowhere does Paneth teach or suggest that the slots can be offset by less than one time slot. Paneth requirement of at least one time slot makes sense because attempting to make the offset shorter (i.e., less than one time slot) is not practical for half-duplex operation.

For example, assume a half-duplex subscriber unit is transmitting in a particular transmit time slot on the reverse channel. If the offset between the receive time slot on the forward channel is less than the transmit time slot on the reverse channel, when the unit returns to receive mode, the receive time slot is unusable because it has already begun to pass before the unit has entered receive mode (i.e., since it is less than one time interval, it overlaps with the transmit time slot). Thus, the unit must wait until the next complete receive time slot in the next cycle is available before it can properly enter receive mode which is not very practical for half-duplex operation.

On the other hand, using Paneth's technique, where the offset is greater than one time cycle, when the subscriber unit switches from transmit mode to receive mode, the receive time slot is less than one cycle away thus the subscriber unit needs to wait a lesser amount of time than if the offset were less than one time slot. Thus, using an offset that is greater than one time cycle is much more practical for the system described by Paneth.

Because of the absence of *wherein the second predetermined cycle is out of phase with the first predetermined cycle by less than one interval* in Paneth, the Applicants respectfully submit that Paneth does not anticipate claims 1-5, 7-9, 13, 15-18 and 22-24. Therefore, the Applicants respectfully request that the above rejections to these claims be withdrawn.

§ 103 Rejections

In the Office Action, claims 6, 11, 14 and 20 were rejected under 35 U.S.C. § 103 as being unpatentable over Paneth.

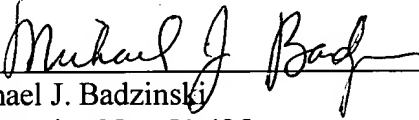
The Applicants' respectfully submit that for reasons set forth above, Paneth fails to teach or suggest *wherein the second predetermined cycle is out of phase with the first predetermined cycle by less than one interval* which is clearly recited in these claims. Thus, the Applicants respectfully submit that Paneth fails to render claims 6, 11, 14 and 20 obvious. Therefore, the Applicants respectfully request that the above rejections to these claims be withdrawn.

CONCLUSION

In view of the above amendments and remarks, it is believed that all claims are in condition for allowance, and it is respectfully requested that the application be passed to issue. If the Examiner feels that a telephone conference would expedite prosecution of this case, the Examiner is invited to call the undersigned.

Respectfully submitted,

HAMILTON, BROOK, SMITH & REYNOLDS, P.C.

By 
Michael J. Badzinski
Registration No. 51,425
Telephone: (978) 341-0036
Facsimile: (978) 341-0136

Concord, MA 01742-9133

Dated: 5/15/06